

CLAIMS

What is claimed is:

1.

A rake wheel, comprising:

a hub having a rotational axis;

a plurality of tines connected to said hub and extending outwardly therefrom in a plane perpendicular to the hub rotational axis;

an annular rim concentric with the hub and having a first plurality of apertures formed therein and spaced uniformly around the circumference of the rim, each said tine having at least one leg projecting through one of said first plurality of apertures and projecting outwardly to a free end beyond the rim;

each of said first plurality of apertures having a size and shape to snugly, slidably receive a tine therethrough; and

a second plurality of apertures formed in the rim, each of the second plurality of apertures having a size and shape substantially the same as each of the first plurality of apertures, and spaced uniformly around the circumference of the rim.

2.

The rake wheel of claim 1, wherein said hub includes a pair of parallel disk-shaped flanges connected together, and wherein said tines are connected to said hub generally centrally between said flanges.

3.

The rake wheel of claim 2, wherein each of said second plurality of apertures is positioned generally centrally between a pair of said first plurality of apertures.

4.

The rake wheel of claim 3, wherein each of said tines is bent in half at an elbow with the elbow secured to said hub, and with first and second legs projecting outwardly from the elbow, each said leg journaled through one of said first plurality of apertures.

5.

The rake wheel of claim 4, wherein each of said hub flanges have an inner ring and an outer ring, the inner rings of the flanges abutting one another and secured together, the outer rings of the flanges spaced apart from one another and parallel to one another to form an annular slot therebetween, and wherein each of the tines is secured to the hub within the annular slot between the outer rings.

6.

The rake wheel of claim 5, wherein said hub includes a plurality of removable bolts extending between the outer rings and through the annular slot, and wherein each tine elbow is connected to each said bolt.

7.

The rake wheel of claim 1, wherein each of said tines is bent in half at an elbow with the elbow secured to said hub, and with first and second legs projecting outwardly from the elbow, each said leg journaled through one of said first plurality of apertures.

8.

The rake wheel of claim 2, wherein each of said hub flanges have an inner ring and an outer ring, the inner rings of the flanges abutting one another and secured together, the outer rings of the flanges spaced apart from one another and parallel to one another to form an annular slot therebetween, and wherein each of the tines is secured to the hub within the annular slot between the outer rings.

9.

The rake wheel of claim 1, further comprising:
a generally planar, disk-shaped windshield removably connected to said wheel;
said shield extending radially outwardly from a central opening to an outer diameter beyond the rim of the wheel, said central opening forming an inner diameter of the shield;
said shield inner diameter being less than an outer diameter of the hub, such that the shield covers the tines from the hub to a point beyond the rim.

10.

The rake wheel of claim 9, wherein said rim includes a plurality of collars removably connected to a plurality of said second plurality of rim apertures, each collar oriented orthogonal to the wind shield, and further comprising a plurality of removable fasteners extending through said collars and through a plurality of apertures formed in the wind shield associated with each collar to removably secure said shield to said collars and rim.

11.

The rake wheel of claim 2, further comprising:

a generally planar, disk-shaped windshield removably connected to said wheel;
said shield extending radially outwardly from a central opening to an outer diameter
beyond the rim of the wheel, said central opening forming an inner diameter of
the shield;
said shield inner diameter being less than an outer diameter of the hub, such that the
shield covers the tines from the hub to a point beyond the rim.

12.

The rake wheel of claim 11, wherein said rim includes a plurality of collars
removably connected to a plurality of said second plurality of rim apertures, each collar
oriented orthogonal to the wind shield, and further comprising a plurality of removable
fasteners extending through said collars and through a plurality of apertures formed in
the wind shield associated with each collar to removably secure said shield to said
collars and rim.

13.

The rake wheel of claim 12, wherein:
said hub flanges include a radially projecting lip having an outer diameter;
the inner diameter of the wind shield is less than the outer diameter of the lip and
greater than a diameter of a circle circumscribed by the bolts securing the tines;

whereby the tine bolts and the tines may be removed and replaced without removing
the windshield.